

SYSTEMS ENGINEER

Purpose Statement

Under the direction of an assigned manager and/or supervisor, provides effective provisioning, installation, configuration, operation, and maintenance of systems hardware, software and related infrastructure; participates in technical research and development to enable continuing innovation within the infrastructure; ensures that system hardware, operating systems, software systems and related procedures adhere to organizational values, enabling students, teachers and staff; and performs operations activities within a project life-cycle to ensure a smooth transition of projects from development to production.

Essential Functions

- Assists project teams with technical issues in the initiation and planning phases of the District's standard Project Management Methodology including definition of needs, benefits and technical strategy, research and development within a project life-cycle; technical analysis and design; and support of operations staff in executing, testing and rolling-out solutions.
- Installs new and rebuilds existing servers; configures hardware, peripherals, services, settings, directories, and storage in accordance with standards and project/operational requirements.
- Installs and configures systems in support of the District infrastructure applications or network applications.
- Develops and maintains installation and configuration procedures.
- Researches and recommends innovative and automated approaches for system administration tasks; identifies approaches that leverage District resources and provides economies of scale.
- Performs daily system monitoring; verifies the integrity and availability of all hardware, server resources, systems and key processes; reviews system and application logs and verifies completion of scheduled jobs, including backups.
- Performs regular security monitoring to identify any possible intrusions.
- Performs daily backup operations, ensuring all required file systems and system data are successfully backed up to the appropriate media, recovery tapes or disks; recycles and sends media off site as necessary.
- Performs regular file archival and purge as necessary.
- Creates, changes and deletes user accounts per request.
- Repairs and recovers from hardware or software failures. Coordinates and communicates with impacted constituencies.
- Applies patches and upgrades on a regular basis; upgrades administrative tools and utilities; adds and configures new services as necessary.
- Upgrades and configures system software that supports the District infrastructure applications or network applications per project or operational needs.
- Performs ongoing performance tuning, hardware upgrades, and resource optimization as required; configures CPU, memory and disk partitions as required.
- Maintains data center environmental and monitoring equipment.

Other Functions

- Performs related duties as assigned.

Job Requirements: Minimum Qualifications**Skills, Knowledge and Abilities**

SKILLS are required to perform multiple, complex, technical tasks with a need to occasionally upgrade skills in order to meet changing job conditions. Specific skills required to satisfactorily perform the functions of the job include: design, development, implementation and testing of complex integrated network, hardware, software and system security solutions to organizational requirements; problem analysis and resolution skills as applied to the installation, maintenance, modification and troubleshooting of network, hardware, software and system security services; interpretation of technical and complex materials required for the position.

KNOWLEDGE is required to perform advanced math; review and interpret complex materials; and analyze situations to define issues and draw conclusions. Specific knowledge required to satisfactorily perform the functions of the job include: knowledge of relevant state-of-the-art technology, equipment, and/or systems; knowledge of systems integration and automation techniques and tools; knowledge related to relevant operating systems, security, file structure, various web browsers, Active Directory administration, Group policy, remote desktop, LAN/WAN knowledge, wired and wireless technologies, application installation and administration.

ABILITY is required to gather, collate, and/or classify data; and use job-related equipment. Flexibility is required to independently work with others in a wide variety of circumstances; analyze data utilizing defined but different processes; and individuals and/or groups; work with data of widely varied types and/or purposes; and utilize a variety of job-related equipment. In working with others, independent problem solving is required to analyze issues and create action plans. Problem solving with data requires analysis based on organizational objectives; and problem solving with equipment is significant. Specific abilities required to satisfactorily perform the functions of the job include: adapting to changing work priorities; communicating with diverse groups; maintaining confidentiality; meeting deadlines and schedules; setting priorities; working as part of a team; working with detailed information/data.

Working Environment

The work environment characteristics are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions. The usual and customary methods of performing the job's functions require the following physical demands: standing; walking; sitting; using hands to finger, handle or feel objects, tools or controls; reach with hands and arms; bend; stoop; kneel; crouch; climb; talk and hear. The employee must lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision and distance vision. The noise level in the work environment is usually moderate.

Education/Experience

Any combination equivalent to a college degree with a technical major such as computer science or engineering or five (5) years experience in system administration.

Required Testing

None Specified

Certificates & Licenses

Valid California Driver's License

Continuing Educ./Training

None Specified

Clearances

Pre-placement Physical Exam; TB Clearance; and Criminal Justice Fingerprint/Background Clearance.

Sweetwater Union High School District programs and activities shall be free from discrimination based on age, gender, gender identity or expression, or genetic information, sex, race, color, religion, ancestry, national origin, ethnic group identification, marital or parental status, physical or mental disability, sexual orientation; the perception of one or more of such characteristics; or association with a person group with one or more of these actual or perceived characteristics." SUHSD Board Policy 0410